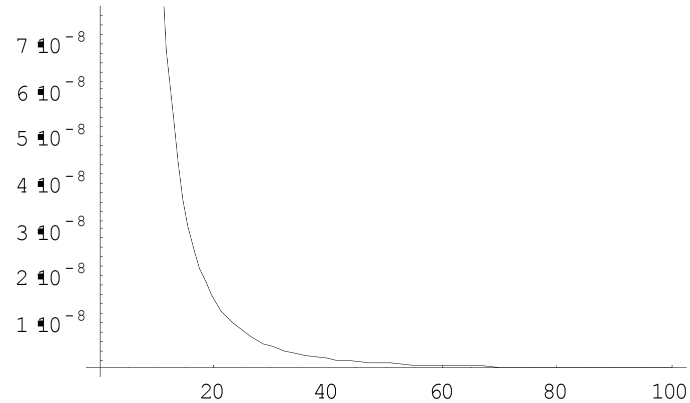

Fig.1. Plot of $\rho + p_r$ with distance. We find that $\rho + p_r \geq 0$ and that it rapidly decreases with distance. In all the figures, the values of the constants are chosen as $l = 0.000001$ and $D = 0.00001$ and the distances along the abscissa are in Kpc.

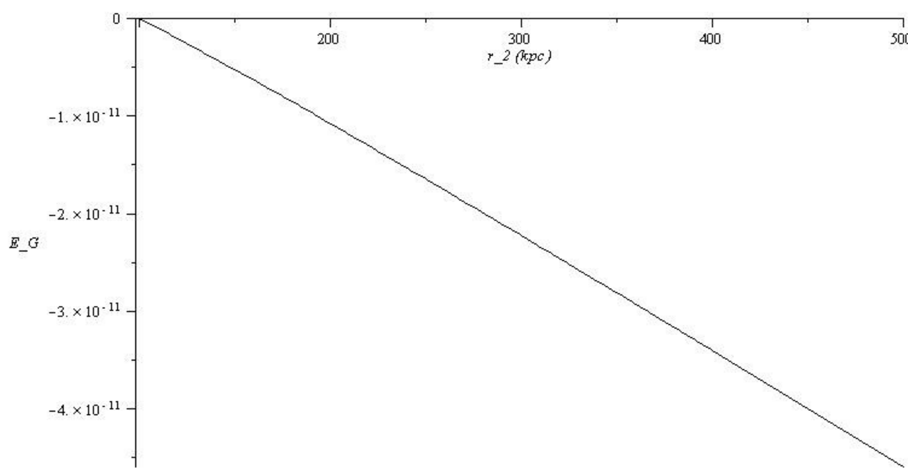

Fig.2. Plot of the gravitational energy as defined in the manuscript. In the domain illustrated here, this quantity is negative.

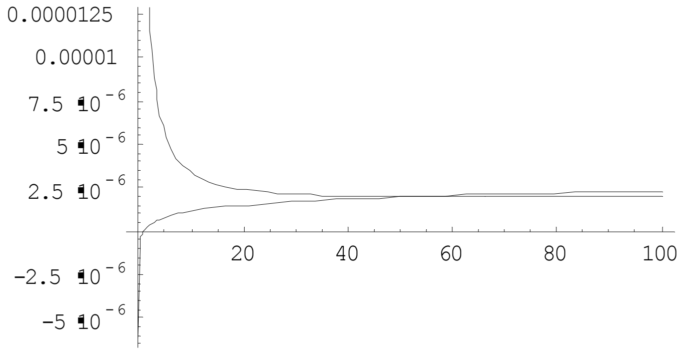

Fig.3. Upper curve represents the functions Φ_{lens} and the lower curve Φ_{RC}. Although the functions differ nearer to the center, the difference becomes of the order of 10^{-6} as one moves away from the center.

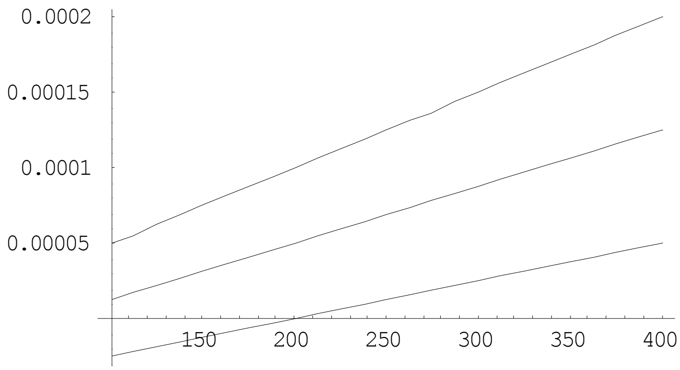

Fig.4. Upper line represents $m_{RC}(r)$, the middle one $m_{lens}(r)$ and the lower one $M(r)$. All the masses increase with distance, though slightly diverge in values in the far field.

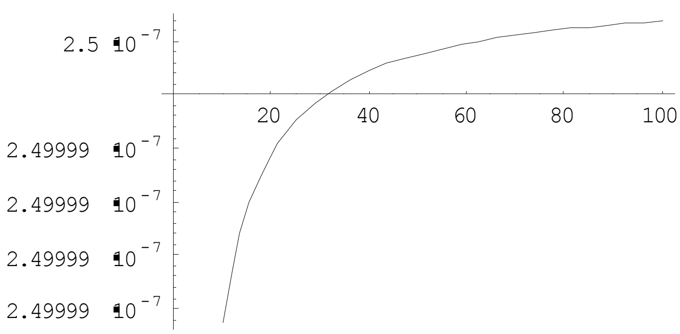

Fig.5. Plot of $2(m'_{RC} - m'_{lens})$ vs.r. We see that the value is of order $\sim 10^{-7}$, which indicates that pressure contributions are negligible in the current solution. The solution thus describes a Newtonian system.

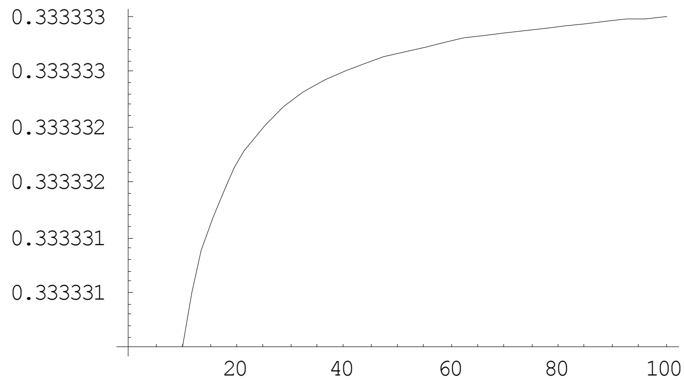

Fig.6. Plot of $\omega(r)$ vs r. We can clearly see that the equation of state predicted by the considered solution is $\omega = 1/3$. One expects this equation of state to be supported by combined observations.